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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,875

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Takanori Ichiki

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SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

CHONG, DAVID W

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

10/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,875	Applicant(s) ICHIKI ET AL.	
	Examiner DAVID CHONG	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
2. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the stereoscope microscope image and one fluorescent image are made to correspond to each other at the same time.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Zold US 4,175,662.
6. Regarding claim 4, Zold teaches a cell analysis and sorting apparatus (col. 1 lines 5-7) comprising: a first channel into which a fluid containing sample is introduced (Fig. 3 orifice 28), the samples being introduced by a laminar flow

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(col. 3 line 1) into a sample-separating portion (Fig. 3, sample-separating section between electrodes 18 and 20); second and third channels arranged symmetrically on both sides of the first channel (Fig. 3 second and third channels 36 and 37), a pair of streams of fluid which are made to meet in the sample-separating portion and which contain no samples being introduced into the second and third channels (pure electrolyte enters laminarly at both sides, col. 8 lines 24-27); means for selecting samples at the sample-separating portion (Fig. 3, electrodes 18 and 20); a middle channel (Fig. 3 channel 58) capable of being the sample recovery channel disposed downstream of the channel into which the samples are introduced such that the fluid containing a sample selected from the sample-selecting portion flows out in a laminar flow (col. 5 lines 3-4); a pair of fluid passages which are arranged symmetrically on both sides of the sample recovery channel (Fig. 3 fluid passages 52 and 54) capable of discharging unwanted sample; wherein the apparatus of Zold is capable of controlling flow velocity according to the difference between the height of the liquid surface of the fluid introduced into said channel (Fig. 1 fluid introduction containers 38 and 40) and the height of the liquid surface in the channel downstream of the sample-separating portion (Fig. 1 downstream containers 22 and 24).

7. Regarding claim 5, Zold teaches electrodes at the sample separating portion (col. 2 lines 20-24) which can introduce an external force to unwanted samples to be discharged.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zold US 4,175,662 in view of Basiji US 6,211,955.
5. Regarding claims 6, 7, 9, 10, 11, and 13 Zold teaches an optical microscope (col. 5 lines 35-36) inherently having an observational lens capable of analyzing and sorting samples based off of fluorescent light (col. 1 lines 32-35) in at least one wavelength region. Zold does not teach wherein a stereoscopic image and a fluorescent microscope image of samples are observed. Basiji teaches the imaging and analyzing of cells using a stereoscopic imaging system (col. 13 line 22) capable of producing stereoscopic microscope image (col. 13 lines 35-36) and a fluorescent image (col. 8 lines 20-24) and made to correspond to each other at the same time (col. 4 lines 1-3). At the time of the invention it would have been obvious to a person of ordinary skill in the art to utilize the stereoscopic imaging system of Basiji with the cell sorting apparatus of Zold since it would provide rapid collection of data from a large cell population (Basiji, col. 3 lines 65-67).
6. Regarding claims 8 and 12, Zold/Basiji teaches the elements of claims 7 and 11. Zold does not teach an observational camera fitted to one optical microscope. Basiji teaches an imaging lens to produce an image of the sample, i.e. an observational camera (col. 5 lines 18-22) which focuses the image onto a photosensitive surface. At the time of the invention it would have been obvious to a person of ordinary skill in the art to fit the optical microscope of Zold with the observational camera in order distinguish features that would otherwise overlap when viewed from a single direction (Basiji, col. 13 lines 1-2).

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7. Regarding claim 14 and 15, the Zold/Basiji teaches the apparatus in claims 10 and 13. Zold does not teach an observational camera fitted to one optical microscope. Basiji teaches an imaging lens to produce an image of the sample, i.e. an observational camera (col. 5 lines 18-22) which focuses the image onto a photosensitive surface. At the time of the invention it would have been obvious to a person of ordinary skill in the art to fit the optical microscope of Zold with the observational camera in order distinguish features that would otherwise overlap when viewed from a single direction (Basiji, col. 13 lines 1-2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CHONG whose telephone number is (571)270-3718. The examiner can normally be reached on Monday through Friday, 7:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DC/

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797